

Owner's Manual

CRAFTSMAN®

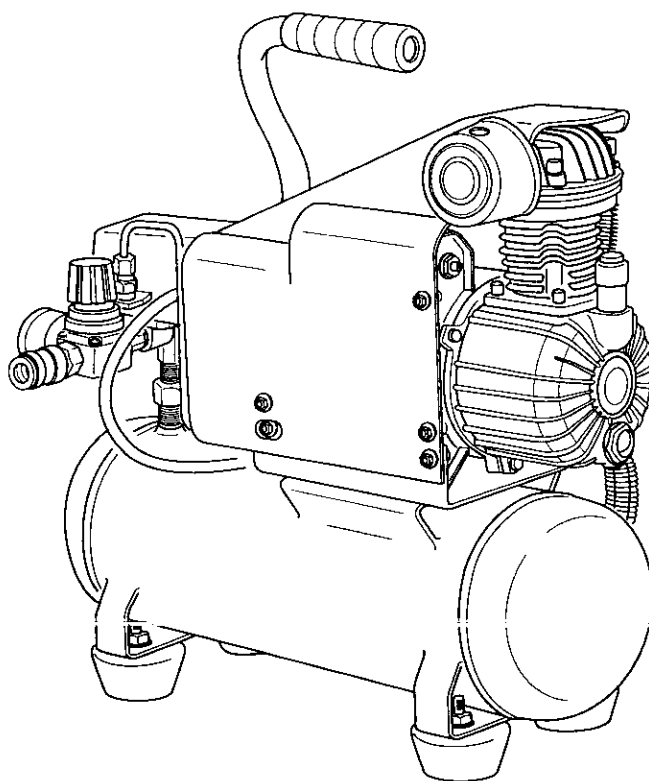
AIR COMPRESSOR

2-gallon

1.5 HP (peak)

Oil Lubricated

Model No. 921.152100



CAUTION:

Before using this product,
read this manual and follow
all its Safety Rules and
Operating Instructions.

- Safety Instructions
- Installation & Operation
- Maintenance & Storage
- Troubleshooting Guide
- Parts List
- Español, p. 12

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.
www.sears.com/craftsman

TABLE OF CONTENTS

	Page
Warranty	2
Safety Instructions	3
Important Safety Instructions & Guidelines	3
Specifications.....	4
Glossary	5
Duty Cycle	5
Parts & Features	5
Installation & Assembly	6
Operating Procedures	7
Maintenance	8
Storage	8
Troubleshooting Guide	9
Parts List.....	10
Español.....	12

FULL ONE YEAR WARRANTY ON CRAFTSMAN AIR COMPRESSOR

If this Craftsman Air Compressor fails due to manufacturer's defects in material or workmanship within one year of the date of purchase, RETURN IT TO THE NEAREST SEARS STORE OR SERVICE CENTER IN THE UNITED STATES and it will be replaced or repaired (at our option), free of charge.

If this Air Compressor is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

**Sears, Roebuck and Co., Dept. 817WA,
Hoffman Estates, IL 60179**

Safety Instructions

The information listed below should be read and understood by the operator. This information is given to protect the user while operating and storing the air

compressor. We utilize the symbols below to allow the reader to recognize important information about their safety.




<p align="center">⚠ DANGER</p> <p>Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.</p>	<p align="center">⚠ CAUTION</p> <p>Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</p>
<p align="center">⚠ WARNING</p> <p>Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury</p>	<p align="center">CAUTION</p> <p>When used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.</p>

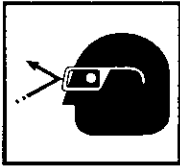




Important Safety Instructions and Guidelines

- Save all instructions

⚠ WARNING

Improper operation or maintenance of this product could result in serious injury and/or property damage. Read and understand all of the warnings and safety instructions provided before using this equipment.

<p align="center">CAUTION</p>	<p>The air compressor should be operated on a dedicated 15 amp circuit. If the circuit does not have 15 free amps available, a larger circuit must be used. Always use more air hose before utilizing extension cords. All extension cords used must be 12 gauge with a maximum length of 25 ft. The circuit fuse type must be a time delay. Low voltage could cause damage to the motor.</p>
<p>Risk of Moving Parts</p> 	<p>If the air compressor is in operation, all guards and covers should be attached or installed correctly. If any guard or cover has been damaged, do not operate the equipment until the proper personnel has correctly repaired the equipment. The power cord should be free of any moving parts, twisting and/or crimping while in use and while in storage.</p>
<p>Risk of Burns</p> 	<p>There are surfaces on your air compressor that while in operation and thereafter can cause serious burns if touched. The equipment should be allowed time to cool before any maintenance is attempted. Items such as the compressor pump and the outlet tube are normally hot during and after operation.</p>
<p>Risk of Falling</p> 	<p>Operation of the air compressor should always be in a position that is stable. Never use the air compressor on a rooftop or elevated position that could allow the unit to fall or be tipped over. Use additional air hose for elevated jobs.</p>

<p>Risk from Flying Objects</p> 	<p>Always wear ANSI Z87.1 approved safety glasses with side shields when the air compressor is in use. Turn off the air compressor and drain the air tank before performing any type of maintenance or disassembly of the hoses or fittings. Never point any nozzle or sprayer toward any part of the body or at other people or animals.</p>
<p>Risk to Breathing</p> 	<p>Avoid using the air compressor in confined areas. Always have adequate space (12 inches) on all sides of the air compressor. Also keep children, pets, and others out of the area of operation. This air compressor does not provide breathable air for anyone or any auxiliary breathing device. Spraying material will always need to be in another area away from the air compressor to not allow intake air to damage the air compressor filter.</p>
<p>Risk of Electrical Shock</p> 	<p>Never utilize the air compressor in the rain or wet conditions. Any electrical issues or repairs should be performed by authorized personnel such as an electrician and should comply with all national and local electrical codes. The air compressor should also have the proper three prong grounding plug, correct voltage, and adequate fuse protection.</p>
<p>Risk of Explosion or Fire</p> 	<p>Never operate the compressor near combustible materials, gasoline or solvent vapors. If spraying flammable materials, locate the air compressor at least 20 feet away from the spray area. Never operate the air compressor indoors or in a confined area.</p>
<p>Risk of Bursting</p> 	<p>Always drain the air compressor tank daily or after each use. If the tank develops a leak, then replace the air compressor. Never use the air compressor after a leak has been found or try to make any modifications to the tank. Never modify the air compressor's factory settings which control the tank pressure or any other function.</p>

Specifications

Pump	Oil-lube direct drive
Motor Induction	1.5 HP Peak
Bore	1.65"
Stroke	1.26"
Voltage Single Phase	120 VAC
Minimum Circuit Requirement	15 Amps
Air Tank Capacity	2 Gallons
Cut-in Pressure	95 PSI
Cut-out Pressure	125 PSI
SCFM @ 90 PSI	2.4

Glossary

CFM: Cubic feet per minute.

SCFM: Standard cubic feet per minute; a unit of measure for air delivery.

PSIG: Pounds per square inch gauge; a unit of measure for pressure.

ASME: American Society of Mechanical Engineers.

California Code: Unit may comply with California Code 462 (l) (2)/ (M) (2).

Cut-In Pressure: The air compressor will automatically start to refill the tank when the pressure drops below the prescribed minimum.

Cut-Out Pressure: The point at which the motor stops when the tank has reached maximum air pressure.

Code Certification: Products that bear one or more of the following marks: UL, CUL, ETL, CETL, have been evaluated by OSHA-certified independent safety laboratories and meet the applicable Underwriters Laboratories Standards for Safety.

Duty Cycle

This is a 50% duty cycle air compressor. Do not run the air compressor more than 30 minutes of one hour. Doing so could damage the air compressor.

Parts & Features

See figures below for reference.

Drain Valve: Used to drain condensation from the air tank. Located at bottom of tank.

Motor Thermal Overload: The motor has an automatic thermal overload protector. If the motor overheats, this protector will shut off the motor. The motor must be allowed 30 minutes to cool before restarting.

Quick Connect: Offers a quick release feature for attaching and removing the air hose.

Pressure Switch: This controls the power to the motor and also the cut-in/cut-out pressure settings. This switch serves as the Auto-On/Off positions for the unit.

Air Intake Filter: Provides clean air to the pump and must always be kept free of debris. Check on a daily basis or before each use. Picture shown in assembly section.

Air Compressor Pump: Oil lubricated direct driven pump that compresses air which is distributed to the tank (not shown).

Check Valve: When the pump is not in operation the valve closes to retain air pressure inside the tank. An internal component.

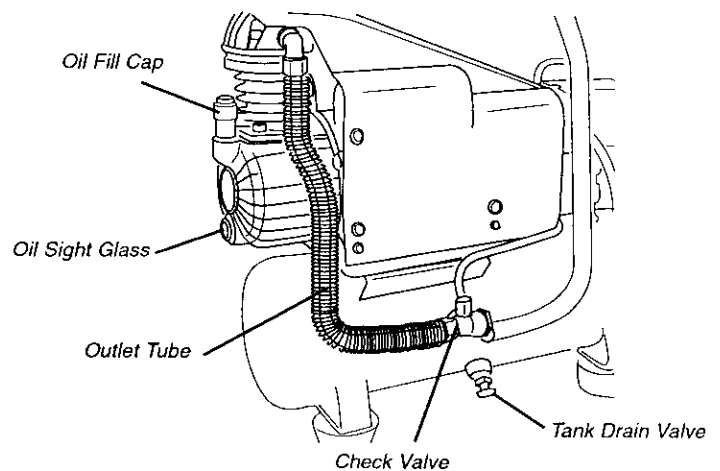
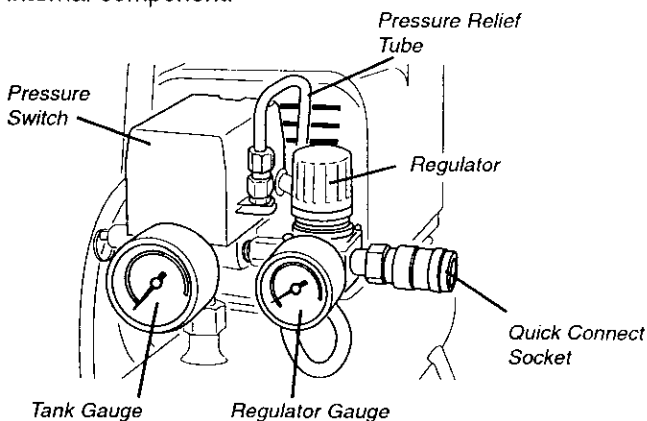
Pressure Relief Valve: The pressure relief valve located on the side of the pressure switch, is designed to automatically release compressed air when the air compressor reaches cut-out pressure. The released air should only escape momentarily and the valve should then close.

Tank Safety Valve: Used to allow excess tank pressure to escape into the atmosphere. This valve should only open when the tank pressure is above the maximum rated pressure.

Outlet Pressure Gauge: Indicates the outgoing air pressure to the tool and is controlled by the regulator.

Tank Pressure Gauge: Indicates the reserve air pressure in the tank.

Regulator: The air pressure coming from the air tank is controlled by the regulator. To increase the pressure turn the knob clockwise and to decrease the pressure turn the knob counterclockwise.



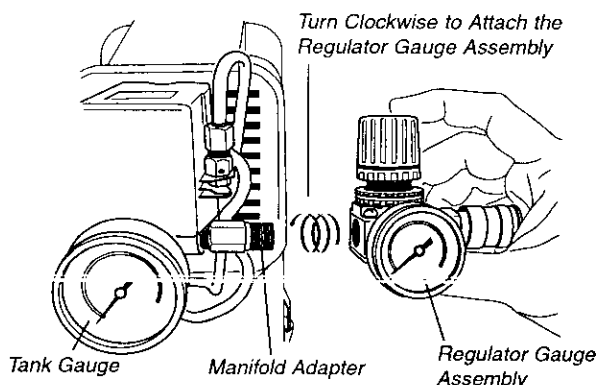
Installation & Assembly

⚠ WARNING

The air compressor should be turned off and unplugged from the power source before any maintenance is performed as well as the air bled from the tank and the unit allowed time to cool. Personal injuries could occur from moving parts, electrical sources, compressed air or hot surfaces. The regulator assembly must be attached before use. Failure to assemble correctly could result in leaks and possible injury. If unsure of assembly instructions or you experience difficulty in the assembly please call your local service department for further instruction.

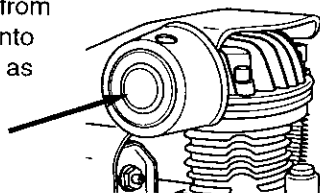
Regulator Assembly

1. Before assembly remove the shipping plug and label from the manifold adapter. Check to be sure that the adapter has a sealant applied from the factory to prevent leaks around the threads.
2. Attach the regulator assembly to the air compressor by aligning the regulator to the threaded male adapter on the manifold. Be certain to align the threads before tightening to prevent thread damage.
3. The assembly should turn clockwise for approximately 6-7 revolutions. The tank and regulator gauge should be facing in the same direction (see the figure below). To prevent damage and leaks, do not over-tighten.



To Install the Air Intake Filter

Remove the air intake filter from the poly bag and thread it onto the head of the compressor as shown.

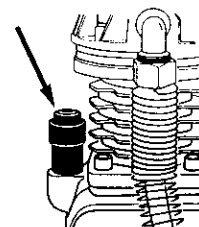


⚠ CAUTION

Do not attempt to start the air compressor without first adding oil to the crankcase. Serious damage can result unless filled with oil. The pump is shipped without oil from the factory. Only use non-detergent oils since multi-viscosity motor oils leave carbon deposits on pump components, thus reducing performance and compressor life.

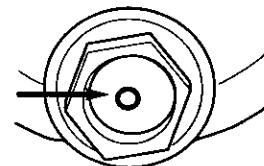
⚠ WARNING

Drain the tank to release all tank air pressure before removing the oil fill cap. Be sure the air vent in the oil fill cap (see figure to the right) is free from debris. If air vent is blocked, pressure can build in crankcase causing damage to the compressor and possible personal injury.



Lubrication and Oil

Remove the oil fill cap by turning it counter-clockwise by hand. Fill the compressor pump with an air compressor oil such as SAE-30 non-detergent (API CG/CD Heavy Duty) oil at slow intervals until the oil reaches the center of the red circle in the sight glass (see figure above). Use SAE-10 during extreme winter conditions.

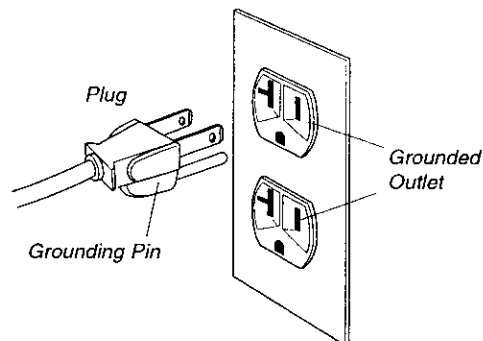


Location of the Air Compressor

The air compressor should always be located in a clean, dry, and well ventilated environment. The unit should have at minimum, 12 inches of space on each side. The air filter intake should be free of any debris or obstructions. Check the air filter on a daily basis to be sure it is clean and in working order.

Grounding Instructions

This product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug (See the figure below.) The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances. Check with a qualified electrician or service personnel if these instructions are not completely understood or if in doubt as to whether the tool is properly grounded.



⚠ WARNING

Improper installation of the grounding plug will result in a risk of electric shock. If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded. Do not modify the plug provided; if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

This product is for use on a circuit having a nominal rating of 120 volts and is factory-equipped with a specific electric cord and plug to permit connection to a proper electric circuit. Make sure that the product is connected to an outlet having the same configuration as the plug. No adapter should be used with this product. If the product must be reconnected for use on a different type of electric circuit, qualified service personnel should make the reconnection.

Operating Procedures

Daily Start-Up Procedures

1. Set the Auto-On/Off lever to the Off position.
2. Check the air compressor visually for any damage or obstruction.
3. Close the drain valve.
4. Check the oil level of the pump.
5. Connect the air hose to the quick connect socket on the regulator assembly by inserting the quick connect plug on the air hose into the quick connect socket. The quick connect socket collar will snap forward and lock the plug into place providing an air tight seal between the socket and plug. To release the air hose push the collar back on the quick connect socket.
6. Plug the power cord into the proper receptacle.
7. Turn the Auto-On/Off lever to the On-Auto position and the compressor will start and build air pressure in the tank to cut-out pressure and then shut off automatically.
8. Adjust the regulator to a PSI setting that is needed for your application and be sure it is within the safety standards required to perform the task. If using a pneumatic tool, the manufacturer should have recommendations in the manual for that particular tool on operating PSI settings.
9. The air compressor is now ready for use. The following inflation and cleaning accessories packaged with this unit should only be operated at maximum pressure of 20-30 PSI: blow gun, tapered nozzle, inflation needles, wire brush adapter, blow gun adapter.

Extension Cords

Use only a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that will accept the plug on the product. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. Cords must not exceed 25 feet and No. 12 AWG size must be used. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

Break In Procedures

No break in procedure is required by the user. This product is factory tested to ensure proper operation and performance.

Daily Shut-Down Procedures

1. Set the Auto-On/Off lever to the Off position.
2. Unplug the power cord from the receptacle.
3. Set the outlet pressure to zero on the regulator.
4. Remove any air tools or accessories. When draining the tank, always use ear and eye protection. Drain the tank in a suitable location; condensation will be present in most cases of draining.
5. Open the drain valve allowing air to bleed from the tank. After all of the air has bled from the tank, close the drain valve to prevent debris buildup in the valve.

⚠ CAUTION

When draining the tank, always use ear and eye protection. Drain the tank in a suitable location; condensation will be present in most cases of draining.

⚠ WARNING

Water that remains in the tank during storage will corrode and weaken the air tank which could cause the tank to rupture. To avoid serious injury, be sure to drain the tank after each use or daily.

Maintenance

NOTE: Any service procedure not covered in the maintenance schedule below should be performed by qualified service personnel.

Items to Check/Change	Before each use or daily	After first 10 hours	Every 100 hours
Check Tank Safety Valve	X		
Overall Unit Visual Check	X		
Check Oil Level	X		
Change Oil		X	X
Check Air Filter (more frequently in dusty or humid environments)	X		

⚠ CAUTION

To ensure efficient operation and longer life of the air compressor unit, a routine maintenance schedule should be followed. The following schedule is geared toward a consumer whose compressor is used in a normal working environment on a daily basis. If necessary, the schedule should be modified to suit the conditions under which your compressor is used. The modifications will depend upon the hours of operation and the working environment. Air compressors used in an extremely dirty and/or hostile environment will require a greater frequency of all maintenance checks.

Oil Changing

For changing the pump oil, be sure to do the following:

1. Turn the unit off and unplug the power cord from the receptacle.
2. Allow the compressor time to cool if it has been in operation.
3. Open the drain valve to bleed all air from the tank.
4. Close the drain valve.
5. Remove the oil fill cap on the pump.
6. Remove the sight glass with a box end wrench or socket. Drain the oil into a suitable container and dispose of properly. The compressor may need to be tipped slightly towards the drain hole to allow all of the oil to drain.

⚠ WARNING

The air compressor should be turned off and unplugged from the power source before any maintenance is performed as well as the air bled from the tank and the unit allowed time to cool. Personal injuries could occur from moving parts, electrical sources, compressed air or hot surfaces.

7. Reattach the sight glass. **Note:** Torque the sight glass 10-12 inch lbs. when re-assembling. Be sure the gasket is between the sight glass and the pump crankcase.
8. Refill the compressor pump with an air compressor oil such as SAE-30 non-detergent (API CG/CD Heavy Duty) oil at slow intervals until the oil reaches the center of the red circle in the sight glass. Use a SAE-10 during extreme winter conditions.

Storage

For storing the air compressor, be sure to do the following:

1. Turn the unit off and unplug the power cord from the receptacle.
2. Remove all air hoses, accessories, and air tools from the air compressor.
3. Perform the daily maintenance schedule.
4. Open the drain valve to bleed all air from the tank.
5. Close the drain valve.
6. Store the air compressor in a clean and dry location.

Troubleshooting Guide

⚠ WARNING The air compressor should be turned off and unplugged from the power source before any maintenance is performed as well as the air bled from the tank and the unit allowed time to cool. Personal injuries could occur from moving parts, electrical sources, compressed air, or hot surfaces.

PROBLEM	POSSIBLE CORRECTION
Air leaks at the check valve or at the pressure relief valve.	A defective check valve results in a constant air leak at the pressure release valve when there is pressure in the tank and the compressor is shut off. Drain the tank, then remove and clean or replace the check valve.
Air leaks between head and cylinder.	Be sure of proper torque on head bolts. If leak remains, contact a service technician.
Air leak from safety valve.	Operate the safety valve manually by pulling on the ring. If the valve continues to leak when in the closed position, it should be replaced.
Pressure reading on the regulated pressure gauge drops when an accessory is used.	If there is an excessive amount of pressure drop when the accessory is used, replace the regulator. NOTE: Adjust the regulated pressure under flow conditions (while accessory is being used). It is normal for the gauge to show minimal pressure loss during initial use of the tool.
Excessive tank pressure.	Move the Auto-On/Off lever to the Off position. If the unit doesn't shut off, unplug it from the power source and contact a service technician.
Motor will not start.	Make sure power cord is plugged in and the switch is on. Inspect for the proper size fuse in your circuit box. If the fuse was tripped, reset it and restart the unit. If repeated tripping occurs, replace the check valve or contact a service technician.
Excessive moisture in the discharge air.	Remove the water in the tank by draining after each use. High humidity environments will cause excessive condensation. Utilize water filters on your air line. NOTE: Water condensation is not caused by compressor malfunction. Be sure the compressor's air output is greater than your tool's air consumption rate.
Air leaks from the tank body or tank welds.	Never drill into, weld or otherwise modify the air tank or it will weaken. The tank can rupture or explode. Compressor cannot be repaired. Discontinue use of the air compressor.

Craftsman Air Compressor Model 921.152100

Parts List

Reference Number	Part Number	Description	Quantity	Reference Number	Part Number	Description	Quantity
1	*E100084	Head Bolt	4	43	E100059	Regulator	1
2	*E100084	Washer	4	44	E100093	Adapter	1
3		Cylinder Head	1	45	E100094	Safety Valve	1
4	E100085	Exhaust Elbow	1	45a	*E100095	Pressure Switch	1
5	*E100086	Gasket	1	45b	*E100095	Bolt	1
6		Valve Plate	2	45c	*E100095	Nut	1
7	*E100086	Valve Reed	2	45d	*E100095	Washer	1
8	*E100086	Gasket Inner	1	46	*E100096	Pressure Relief Tube	1
9		Piston	1	46a	*E100096	Sleeve	2
10	*E100086	Gasket Bottom	1	46b	*E100096	Nut	2
11		Cylinder	1	47	E100097	Grip,Handle	1
12		Bolt	4	48		Tank	1
13		Washer	4	48a	E100098	Drain Valve	1
14	*E100086	Gasket Crankcase	1	49	E100099	Check Valve	1
15		Ring Compression	1	49a	E100100	Elbow	1
16		Ring Scraper	1	50		Motor Cord	1
17		Ring Oil	1	50a		Terminal	2
18		Piston Pin	1	50b		Terminal Closed	1
19		Clip Pin	1	51	E100101	Power Cord	1
20		Rod Connecting	1	52	*E100102	Nut	4
21		Eccentric	1	52a	*E100102	Washer	4
22		Screw Eccentric	1	53	*E100102	Isolator	4
23	E100087	Oil Fill Cap	1	54	*E100102	Washer	4
24		Bolt	3	55	*E100102	Bolt	4
25	*E100088	Oil Sight Gauge	1	56	*E100103	Outlet Tube	1
26	*E100088	Seal, Oil Sight Gauge	1	57	*E100103	Aluminum Fins	1
27		Crankcase	1	58	*E100103	Nut Sleeve Assembly	2
28		O-Ring	1	59	E100104	Air Intake w/Element Filter	1
29		Cover Motor	1	59a	E100105	Element Filter	1
30		Bearing	1				
31	*E100089	Bolt	2				
31a	*E100089	Bolt	2				
32	*E100090	Screw	4				
32a	*E100090	Washer	4				
33		Capacitor	1				
34		Crank Motor	1				
34a		Bearing	1				
35		Rotor	1				
36		Fan	1				
37		Cover Motor	1				
38	*E100090	Shroud Motor	1				
39		Centrifugal Switch	1				
40	E100091	Quick Connect	1				
41	E100093	Gauge Regulator	1				
42	E100092	Gauge Tank	1				

Note: Any part number field without a part number is not offered. Descriptions are provided for reference only.

* This symbol represents that the part being offered is available only in a kit. One of each part per kit will be offered.

Kit number and parts that are included are as follows:

Part #	Reference #
E100084	(1, 2)
E100086	(5 - 8, 10, 14)
E100103	(56 - 58)
E100088	(25, 26)
E100089	(31, 31a)
E100090	(32, 32a, 38)
E100095	(45a - 45d)
E100096	(46, 46a, 46b)
E100102	(52 - 55)
E100104	(59, 59a)

Craftsman Air Compressor Model 921.152100

Parts List

